

**REMARKS/ARGUMENTS**

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-5 are pending in the present application. Claim 6 has been canceled and Claims 1-5 have been amended by the present amendment.

In the outstanding Office Action, Claims 1, 2 and 4 were rejected under 35 U.S.C. § 102(b) as anticipated by WO 96/26992 (herein "WO '992"); Claims 3 and 5 were rejected under 35 U.S.C. § 103(a) as unpatentable over WO '992; and Claim 6 was rejected under 35 U.S.C. § 103(a) as unpatentable over WO '992 in view of Reed Jr. et al. (U.S. Patent 3,830,731, herein "Reed").

Claim 1 has been amended to include the subject matter of Claim 6 and Claim 6 has been canceled. Further, Claim 1 has been amended for clarification, and finds support at page 14, lines 7-19 of the original specification. Also, Claims 2-5 have been amended for clarification. No new matter is added thereby.

Claims 1, 2 and 4 stand rejected under 35 U.S.C. § 102(b) as anticipated by WO '992. This rejection is respectfully traversed.

Amended Claim 1 is directed to a method of treating a crude oil that includes a step of separating the crude oil into a distillate oil and a heavy oil content, a step of thermally cracking the heavy oil content into a lightened thermally cracked product and a step of separating the lightened thermally cracked product. The steps of separating the crude oil and the step of separating the lightened thermally cracked product are performed at the same time, and the distillate oil is collectively introduced into a hydrotreating section and subjected to desulfurization, cracking and hydrogenation treatment collectively.

By providing such a method of treating a crude oil, it is unnecessary to separate the crude oil into fractions by distillation, and a large-scale atmospheric distillation apparatus becomes unnecessary (see specification, page 10, line 19 to, page 11, line 3).

On the contrary, WO '992 discloses a crude oil 3 that is introduced into a crude distillation unit 1 where the crude oil 3 is separated into a top fraction 6, at least one distillate fraction 5 and an atmospheric residue 4 (see WO '992, page 13, line 33 to, page 14, line 6, and Figure 1). Further, WO '992 discloses that any conventional crude oil distillation unit may be applied (see WO '992, page 3, lines 9-12). In particular, WO '992 utilizes a crude oil distillation unit including several side stream strippers for separately recovering kerosene, gasoil, naphtha, and C3 and C4 hydrocarbon gases (see WO '992, page 3, lines 19-25). However, WO '992 does not disclose "... said distillate oil is collectively introduced into a hydrotreating section without separating into each content having prescribed boiling range and is collectively subjected to desulfurization, cracking and hydrogenation treatment" as recited in amended Claim 1.

Further, Reed discloses a hydrodesulfurization process to remove sulfur from a heavy hydrocarbon feedstock, and the hydrodesulfurization process includes a separate hydrodesulfurization zones for vacuum residuum and vacuum gas oil fractions (see Reed, column 2, lines 57-63). Thus, Reed teaches away from "... said distillate oil is collectively introduced into a hydrotreating section without separating into each content having prescribed boiling range and is collectively subjected to desulfurization, cracking and hydrogenation treatment" as recited in amended Claim 1.

Because neither WO '992 nor Reed discloses "... said distillate oil is collectively subjected to desulfurization, cracking and hydrogenation treatment in a hydrotreating section without separating into each content having prescribed boiling range" as recited in amended

Claim 1, even the combined teachings of these cited references are not believed to render the method of treating a crude oil recited in Claim 1 obvious.

Accordingly, it is respectfully submitted that independent Claim 1 and each of the claims depending therefrom define over the cited art.

Claims 3 and 5 stand rejected under 35 U.S.C. § 103(a) as unpatentable over WO '992. This rejection is respectfully traversed.

Claims 3 and 5 depend on Claim 1, which as discussed above defines over the cited art. By virtue of their dependencies on Claim 1, Claims 3 and 5 also define over the cited art.

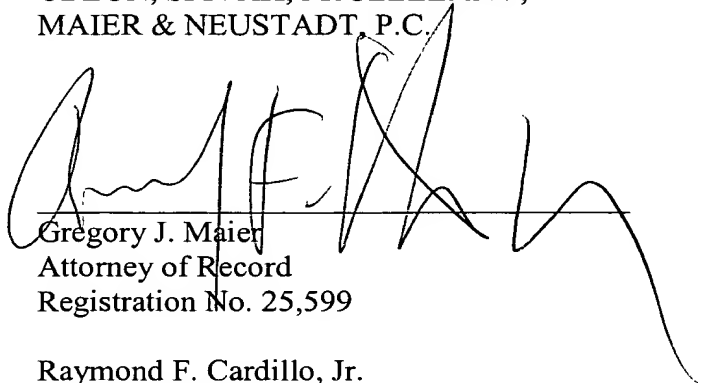
Accordingly, it is respectfully requested this rejection be withdrawn.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as unpatentable over WO '992 and Reed. This rejection is now moot in view of canceling of Claim 6.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Gregory J. Maier  
Attorney of Record  
Registration No. 25,599

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/03)

Raymond F. Cardillo, Jr.  
Registration No. 40,440

GJM/RFC/GS:fm  
I:\ATTY\AKY\21s\215279\AME\_MODIFIED.DOC